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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/699,163	10/27/2000	Michael J. Freeman	5938.25	8449

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EXAMINER	
BUI, KIEU OANH T	

ART UNIT	PAPER NUMBER
2611	

DATE MAILED: 12/01/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/699,163	FREEMAN ET AL.	
	Examiner	Art Unit	
	KIEU-OANH T BUI	2611	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-11* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-11* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *02/12/2004*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> *A person shall be entitled to a patent unless --*
> *(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.*

2. Claims 1-11 are rejected under 35 U.S.C. 102(e) as being anticipated by Harper et al. (U.S. Patent No. 5,537,141).

Regarding claim 1, Harper discloses "a system for providing live interactive digital programming" (Figs. 1 & 4, and col. 7/lines 53-57 & col. 8/lines 27-35 for real-time interactive digital programming addressed), comprising:

"a means for receiving video signals from a plurality of video cameras, one or more of the cameras relaying a different predetermined view of a live event; a means for producing one or more audio signals corresponding to the live event; a means for generating one or more graphics signals", i.e., live interactive sessions from the teacher is recording and broadcasting in real-time to students at remote locations, and the live event comprising audio and video contents for the students to study and learn (col. 9/lines 35-54 & col. 11/line 35 to col. 12/line 25 for either pre-recorded program or live program can be transmitted to the students in either analog or digital transmission);

"at least one digital compression device, connected to the receiving and producing means, for digitally compressing the video, graphics and audio signals; a means for processing, connected to the compression device, wherein the processing means creates a set of data commands which link together the various audio, graphics and video signals, the data commands including branching commands", i.e., audio digital encoder/compressor 500 and video digital encoder compressor 504 are used for digitally compressing the video, graphics and audio signals (Fig. 4, and col. 14/line 53 to col. 15/line 12; and branching commands are addressed in col. 19/lines 5-16 and further paragraphs on col. 19 and 20 for details on branching commands);

"a digital multiplexer, connected to the digital compression device, for multiplexing the video, graphics and audio signals, and the data codes into a combined digital program stream" (Fig. 4, for a digital multiplexer 508 in providing a composite signal, and col. 15/lines 13-25); and "a means for transmitting the combined digital program stream", i.e., satellite or fiber optic, DS, etc can be used for transmitting the combined signal to the receivers 158, see col. 15/lines 13-25);

Regarding claim 2, Harper teaches 'a method for providing live interactive digital programming, comprising the steps of: obtaining video signals from a plurality of video cameras, one or more of the cameras relaying a different view of a live event; producing one or more audio signals corresponding to the live event; creating one or more graphics signals; receiving the video and audio signals in a control studio; digitally compressing the video, graphic and audio signals; producing a set of data codes corresponding to the programming, the data codes including branching commands; digitally multiplexing the video, graphics and audio signals, and

the data codes into a combined digital program stream; transmitting the combined digital program stream" (see claim 1 above for details);

"receiving the combined digital program stream at a receive site" (Fig. 1/at receiver 158);

"re-transmitting the combined digital program stream on a digital cable television distribution system" and "receiving the combined digital program stream at one or more viewer sites"; i.e., distribution system 166 can use either digital satellite or optic fiber or digital cable system for transmitting the combined signal to one or more viewer sites (Fig. 1, and col. 16/lines 15-43);

"gathering viewer specific information; processing the data commands", i.e, based on the student's responses, data commands are processed (col. 16/line 45 to col. 17/line 61 for the operation of classroom master unit);

"digitally demultiplexing the video and audio signals resulting in a first video and audio signal, the first output video and first audio signal selected based on the data commands and gathered viewer specific information" (col. 16/line 45 to col. 17/line 61 for the operation of classroom master unit including the digitally demultiplexing step);

"instructing the digital demultiplexer to commence demultiplexing a second video and second audio signal, the second video signal and second audio signal selected based on the data commands and gathered viewer specific information" and "seamlessly switching from the first to the second video signal; and displaying the second video signal on a screen", i.e., based on the students' response from the first session or performance feedback, the teacher can focus on different area or a second session as needed based on the previous feedback (col. 30/lines 6-25).

As for claim 3, Harper further discloses "comprising the steps of: creating a viewer profile with the gathered viewer specific information; wherein selecting the video and audio signals are based in part on the viewer profile", i.e., based on the student requests and responses, viewer profile is created and stored in the PC's memory of the instructor (col. 20/lines 10-39).

As for claim 4, in further view of claim 2, Harper discloses "wherein the step of gathering viewer specific information comprises the step of displaying at least one interrogatory to the viewer, the content of the interrogatory involving program options; collecting entries from the viewer in response to the interrogatories; and wherein the selection of video or audio signals is based in part on the collected viewer entries", i.e., at least one interrogatory to the viewer or more can be performed and all of viewer entries are collected for providing appropriate video and audio signals using memory branching technique (col. 20/line 10 to col. 23/line 20 for more details and examples for branching technique and interrogatories involved).

Regarding claim 5, Harper discloses "a system for providing live interactive digital programming, comprising: a means for receiving video signals some of which are from a plurality of video cameras, one or more of the cameras relaying a different predetermined view of a live event; a means for producing one or more audio signals corresponding to the live event; a means for generating one or more graphics signals; at least one digital compression device, connected to the receiving and producing means, for digitally compressing the video, graphics and audio signals; a digital multiplexer, connected to the digital compression device, for multiplexing the video, graphics and audio signals, into a combined digital program stream; and a means for transmitting the combined digital program stream" (see claim 1 above).

As for claims 6-8, in view of claim 5, Harper teaches "wherein the transmission means is a satellite transmission system"; "wherein the transmission means is a cable distribution system"; "wherein the transmission means is a broadcast transmission system" (Fig. 1, CATV distribution system 138, satellite system 146, and broadcast transmission system 142).

As for claim 9, in further view of claim 5, Harper suggests "wherein the combined digital program stream is received within a private network", i.e., a closed user group of students can be regarded as a private network (col. 5/line 38 to col. 6/line 64).

As for claim 12, in view of claim 5, Harper suggests "wherein the combined digital program stream is received over the Internet" (col. 18/lines 33-42 as the remote sites can use the Internet for receiving digital program).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> *(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.*

4. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Harper et al. (U.S. Patent No. 5,537,141).

Regarding claim 10, in view of claim 5, Harper does not mention "wherein the combined digital program stream is received within an in-stadium network"; however, the Examiner takes an official notice that this is simply a preference choice of setting up this system within any

network anywhere based on the service provider's choice, for instance, whether it can be set up in a foreign country or a local area, in a supermarket or "in-stadium" network. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Harper's system for a closed group of users as suggested in order to provide this system within a stadium. The motivation for doing this is to offer an enjoyment to viewers in watching a live game or show in a closer up watching at their own video/audio receivers.

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Harper et al. (US. Pat. No.5,585,858) disclose a simulcast of interactive signals with a conventional video signal.

Newman et al. (US Pat. No.6,154,600) disclose media editor for non-linear editing system.

Bigham et al. (US Pat. No.5,677,905) disclose a access subnetwork controller for video dial tone networks.

6. **Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks
Washington, D.C. 20231

or faxed to:

(703) 872-9306, (for Technology Center 2600 only)

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Krista Kieu-Oanh Bui whose telephone number is (703) 305-0095. The examiner can normally be reached on Monday-Friday from 9:00 AM to 6:30 PM, with alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christopher Grant, can be reached on (703) 305-4755.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

KRISTA BUI
PATENT EXAMINER

Krista Bui
Art Unit 2611
November 22, 2004